Page 1 of 10 Permit No. WA 000068-0

Issuance Date: January 31, 1978
Expiration Date: January 31, 1981

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM WASTE DISCHARGE PERMIT

State of Washington DEPARTMENT OF ECOLOGY Olympia, Washington 98504

In compliance with the provisions of
Chapter 90.48 RCW as amended
and
The Federal Water Pollution Control Act Amendments of 1972,
Public Law 92-500

The Aluminum Company of America
Wenatchee Works
P.O. Box 221
Wenatchee, Washington 98801

Plant Location

Malaga

Industry Type

Primary Aluminum Smelting

Receiving Water

Columbia River

Discharge Location

1.8 miles upstream of Rock Island

Waterway Segment Number

26-WRIA-99

is authorized to discharge in accordance with the special and general conditions which follow.

15X

Bruce A. Cameron Assistant Director

Department of Ecology



#### S1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from outfall serial number 001, subject to the following limitations:

	Pounds per day (kg/day)		MONITORING REQUIREMENTS	
Parameter	Daily Average	Daily Maximum	Minimum Frequency	Sample Type
Fluorides	1020 (464)	2080 (946)	Daily	24-hr composite
Total Suspended Solids	1560 (709)	3120 (1418)	Daily	24-hr composite
Oil and Grease*	260 (118)	520 (236)	Daily	24-hr composite
pH**	6.0 to 9.0	6.0 to 9.0	Continuous	Instantaneous
Temperature, °F***			Continuous	Instantaneous
Flow (mgd)	<u></u>		Continuous	Instantaneous
Production, tons/day			Monthly Average	

The daily average is defined as the average of the measured values obtained over a calendar month's time. The daily maximum is defined as the greatest allowable value for any calendar day.

#### Note:

\*Also see condition S4.h.

\*\*Also see condition S4.g.

\*\*\*Also see condition S4.f.

### S2. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (For the domestic wastewater)

Beginning on the date of issuance and lasting until the expiration date of the permit, the permittee is authorized to discharge treated domestic wastewater into outfall serial number 001, subject to the following limitations:

#### EFFLUENT LIMITATIONS

Parameter	Daily Average	Daily Maximum	Daily Minimum
Biochemical Oxygen Demand (5-day)	25 mg/1	45 mg/l	
Total Suspended Solids	30 mg/1	45 mg/1	
Fecal Coliform Bacteria	200/100 ml	400/100 ml	
Chlorine residual		2.0 mg/1	0.5 mg/l

The daily average is defined as the average of the measured values obtained over a calendar month's time.

The daily maximum is defined as the greatest allowable value for any calendar day.

#### S2 (Continued)

The domestic wastewater treatment facility shall have a Washington State Certified Operator in responsible charge of the day-to-day operation and maintenance of this plant.

The operator shall be on duty each day with enough time to do the testing, operation and maintenance, and record the findings daily on a report sheet, which will be submitted to this department monthly, no later than the 15th day of the month following each monthly reporting period.

Complete testing shall be as follows:

	Unit of Measure-		Sampling	
Tests	ment	Sample Point	Frequency	Sample Type
рН	Units	Raw sewage Final effluent	5/week 5/week	Grab
DO	ppm	Raw sewage Final effluent Aeration basin	1/week Daily Weekly	Grab
Settleable Solids	m1/1	Raw sewage Final effluent	5/week 5/week	Grab
SVI		Mixed liquor	2/month	Grab
30-minute settleability		Mixed liquor	Daily	Grab
Chlorine residual*	mg/l	Final effluent	Daily	Grab
BOD*	mg/1	Final effluent	2/month	Composite
Suspended Solids	mg/l	Final effluent	2/month	Composite
Flow*	mgd	Influent or effluent	Daily	Instantaneous
Mixed Liquor Temperature	°F	Aeration basin	Daily	Grab
Fecal* Coliform	Number/ 100 ml	Final effluent	Monthly	Grab

<sup>\*</sup>Only these parameters need be reported. All other results are to be kept at the sewage treatment plant available for inspection and review.

#### S3. MONITORING AND REPORTING

The permittee shall monitor the operation and efficiency of all treatment and control facilities, the quantity and quality of the waste discharged, and the production of aluminum in tons per day. A record of all such data shall be maintained. The permittee shall monitor the parameters as specified in conditions S1 and S2 of this permit.

#### a. Reporting

Monitoring results obtained during the previous month shall be summarized and reported on a Discharge Monitoring Report Form (EPA No. 3320-1) submitted no later than the 15th day of the month following the completed reporting period. The report shall be sent to the Department of Ecology, Olympia, Washington 98504, Attn: Industrial Section. Monitoring shall be started on the date of issuance of this permit and the first report is due no later than the 15th day of the month following the first full month of monitoring.

#### b. Records Retention

The permittee shall retain for a minimum of three years all records of monitoring activities and results, including all reports of recordings from continuous monitoring instrumentation. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or when requested by the director.

#### c. Recording of Results

The permittee shall record each measurement or sample taken pursuant to the requirements of this permit for the following information: (1) the date, exact place, and time of sampling; (2) the dates the analyses were performed; (3) who performed the analyses; (4) the analytical techniques or methods used; and (5) the results of all analyses.

#### d. Representative Sampling

Samples and measurements taken to meet the requirements of this condition shall be representative of the volume and nature of the monitored discharge.

#### e. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall, unless approved otherwise in writing by the department, conform to one of the latest editions of the following references:

(1) American Public Health Association, <u>Standard Methods for</u> the Examination of Water and Wastewaters.

Page 6 of 10 Permit No. WA 000068-0 (2) American Society for Testing and Materials, A.S.T.M. Standards, Part 23, Water, Atmospheric Analysis. (3) Environmental Protection Agency, Water Quality Office Analytical Control Laboratory, Methods for Chemical Analysis of Water and Wastes. S4. OTHER REQUIREMENTS Requirements for Salmonid Survival a. Permittee's waste discharge shall, for salmonid test fishes, allow 100 percent survival in a 65 percent concentration of treated mill effluent for a 96-hour period. These tests shall be conducted by permittee using bioassay techniques provided and/or approved by the Department of Ecology. Test Frequency (1) Minimum frequency - annually. (2) Monthly for three consecutive months when: Process or raw material changes effect effluent composition. (b) Any limitation of S1 is exceeded. Spill Prevention, Containment and Countermeasure Plan The plan on file with the department shall be maintained and updated as required to include any changes which would effect any of the following plan requirements: (1) A description of the reporting system which will be used to alert responsible facility management and appropriate legal authorities. A description of preventive facilities (including overall facility plot) which prevent, contain, or treat spills and unplanned discharges; (3) A list of all oil and hazardous materials used, processed, or stored at the facility which may be spilled into permitted discharge. (4) A facility plot showing all surface drainage routes.

Page 7 of 10 Permit No. WA 000068-0 For purposes of this subsection, plans and manuals required by the following may be included: (a) CFR Title 33, Chapter I, subchapter 0, Part 154, dated December 21, 1972. CFR Title 40, Chapter I, subchapter D, Part 112, dated December 11, 1973. c. Solid Waste Disposal The permittee shall handle and dispose of all solid waste material in such a manner as to prevent their entry into State ground or surface water. The permittee shall not permit leachate from its solid waste material to cause any adverse effect on ground or surface water quality. (3) Six months after the issuance of this permit the permittee shall submit to the department a plan for the handling and disposal of all solid waste material generated at the mill site. All such plans shall be approved by the department to ensure that pollutants are not discharged

# to state waters. Slime Control Reporting

In-plant cooling water slime control program and procedures will be reported in detail yearly starting from the date of issuance of this permit, giving description, amounts, methods, dates, time of duration and points of application for each slimicide used. Deviation from this program and procedures will be noted on the department's monthly effluent report.

#### e. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

#### f. Temperature Criteria

Columbia River water quality immediately outside the permittee's mixing zone described below shall not exceed the following temperature criteria:

(1) No measurable increase (0.5°F) shall be permitted which results in water temperatures exceeding 65°, nor shall an increase arising from the permittee's discharge be permitted in excess of "t"; for purposes hereof, "t" is equal to (90/T-19), where "T" represents the resulting water temperature.

Page 8 of 10 Permit No. WA 000068-0

(2) The boundaries of the mixing zone are defined as follows:

The boundaries in the vertical plane shall be one foot below the receiving water surface and one foot above the bottom.

The lateral boundary shall be 300 feet from center line of the diffuser.

The longitudinal boundary shall be the area between 210 feet and 480 feet from shorelines.

- g. The pH shall not cause a variation of more than 0.5 units in the receiving water.
- h. No visible oil or grease may be discharged.
- i. No measurable cyanides are permitted. Measurable is defined as 0.05 mg/1.

Page 9 of 10 Permit No. WA 000068-0 GENERAL CONDITIONS All discharges and activities authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than or at a level in excess of that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. G2. Whenever a facility expansion, production increase, or process modification is anticipated which will result in a new or increased discharge, or which will cause any of the conditions of this permit to be exceeded, a new application must be submitted together with the necessary reports and engineering plans for the proposed changes. No change shall be made until plans have been approved and a new permit or permit modification has been issued. The diversion or bypass of any discharge from facilities utilized by the permittee to maintain compliance with the terms and conditions of this permit is prohibited, except (a) where unavoidable to prevent loss of life or severe property damage, or (b) where excessive storm drainage or runoff would damage any facilities necessary for compliance with the terms and conditions of this permit. The permittee shall immediately notify the department in writing of each such diversion or bypass in accordance with the procedure in Condition G4. In the event the permittee is unable to comply with any of the conditions of this permit because of a breakdown of equipment or facilities, an accident caused by human error or negligence, or any other cause, such as an act of nature, the permittee shall: Immediately take action to stop, contain, and clean up the a. unauthorized discharges and correct the problem. Immediately notify the department so that an investigation can be made to evaluate the impact and the corrective actions taken and determine additional action that must be taken. Submit a detailed written report to the department describing the breakdown, the actual quantity and quality of resulting waste discharges, corrective action taken, steps taken to prevent a recurrence, and any other pertinent information. Compliance with these requirements does not relieve the permittee from responsibility to maintain continuous compliance with the conditions of this permit or the resulting liability for failure to comply. The permittee shall at all times maintain in good working order and efficiently operate all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

Page 10 of 10 Permit No. WA 000068-0 G6. After notice and opportunity for a hearing this permit may be modified, suspended or revoked in whole or in part during its term for cause including but not limited to the following: Violation of any terms or conditions of this permit; Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; A change in the condition of the receiving waters or any other condition that requires either a temporary or permanent reduction or elimination of the authorized discharge. The permittee shall, at all reasonable times, allow authorized representatives of the Department: To enter upon the permittee's premises for the purpose of inspecting and investigating conditions relating to the pollution of, or possible pollution of, any of the waters of the State, or for the purpose of investigating compliance with any of the terms of this permit; To have access to and copy any records required to be kept under the terms and conditions of this permit; To inspect any monitoring equipment or monitoring method required by this permit; or To sample any discharge of pollutants. If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Federal Act for a toxic pollutant which is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee shall be so notified. Section 307(a) requires that the Administrator of the Environmental Protection Agency shall promulgate effluent standards (or prohibition) for toxic pollutants which he has listed as such. Nothing in this permit shall be construed as excusing the permittee from compliance with any applicable Federal, State, or local statutes ordinances, or regulations. G10. This permit shall be modified, or, alternatively, revoked and ressued to comply with any applicable effluent limitation issued pursuant to the order the United States District Court for the District of Columbia issued on June 8, 1976, in Natural Resources Defense Council, Inc. et. al. v. Russell E. Train, 8 ERC 2120 (D.D.C. 1976), if the effluent limitation so issued: is different in conditions or more stringent than any effluent limitation in the permit; or controls any pollutant not limited in the permit. Ъ.